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**SPLIT SYSTEM****Air Conditioners**

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**MODELS**

**(Ceiling mounted Multi flow cassette type)**

**FCQG71EVEB**

**FCQG100EVEB**

**FCQG125EVEB**

**FCQG140EVEB**

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READ THESE INSTRUCTIONS CAREFULLY BEFORE INSTALLATION.  
KEEP THIS MANUAL IN A HANDY PLACE FOR FUTURE REFERENCE.

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## 1. SAFETY PRECAUTIONS


Please read these “SAFETY PRECAUTIONS” carefully before installing air conditioning equipment and be sure to install it correctly.

After completing installation, conduct a trial operation to check for faults and explain to the customer how to operate the air conditioner and take care of it with the aid of the operation manual. Ask the customer to store the installation manual along with the operation manual for future reference.

This air conditioner comes under the term “appliances not accessible to the general public”.

Meaning of WARNING and CAUTION notices.

 **WARNING** .....Failure to follow these instructions properly may result in personal injury or loss of life.

 **CAUTION** .....Failure to observe these instructions properly may result in property damage or personal injury, which may be serious depending on the circumstances.

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### **WARNING**

- Ask your dealer or qualified personnel to carry out installation work.  
Do not attempt to install the air conditioner yourself. Improper installation may result in water leakage, electric shocks or fire.
- Install the air conditioner in accordance with the instructions in this installation manual.  
Improper installation may result in water leakage, electric shocks or fire.
- Be sure to use only the specified accessories and parts for installation work.  
Failure to use the specified parts may result in the unit falling, water leakage, electric shocks or fire.
- Install the air conditioner on a foundation strong enough to withstand the weight of the unit.  
A foundation of insufficient strength may result in the equipment falling and causing injury.
- Carry out the specified installation work after taking into account strong winds, typhoons or earthquakes.  
Failure to do so during installation work may result in the unit falling and causing accidents.

- Make sure that a separate power supply circuit is provided for this unit and that all electrical work is carried out by qualified personnel according to local laws and regulations and this installation manual.  
An insufficient power supply capacity or improper electrical construction may lead to electric shocks or fire.
  - Make sure that all wiring is secured, the specified wires are used, and that there is no strain on the terminal connections or wires.  
Improper connections or securing of wires may result in abnormal heat build-up or fire.
  - When wiring the power supply and connecting the wiring between the indoor and outdoor units, position the wires so that the control box lid can be securely fastened.  
Improper positioning of the control box lid may result in electric shocks, fire or overheating terminals.
  - If refrigerant gas leaks during installation, ventilate the area immediately.  
Toxic gas may be produced if the refrigerant comes into contact with fire.
  - After completing installation, check for refrigerant gas leakage.  
Toxic gas may be produced if the refrigerant gas leaks into the room and comes into contact with a source of fire, such as a fan heater, stove or cooker.
  - Be sure to switch off the unit before touching any electrical parts.
  - Do not directly touch refrigerant that has leaked from refrigerant pipes or other areas, as there is a danger of frostbite.
  - Be sure to earth the air conditioner.  
Do not earth the unit to a utility pipe, lightning conductor or telephone earth lead.  
Imperfect earthing may result in electric shocks or fire.  
A high surge current from lightning or other sources may cause damage to the air conditioner.
  - Be sure to install an earth leakage breaker.  
Failure to install an earth leakage breaker may result in electric shocks or fire.
- 



## CAUTION

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- While following the instructions in this installation manual, install drain piping to ensure proper drainage and insulate piping to prevent condensation.  
Improper drain piping may result in indoor water leakage and property damage.
  - Install the indoor and outdoor units, power cord and connecting wires at least 1 meter away from televisions or radios to prevent picture interference and noise.  
(Depending on the incoming signal strength, a distance of 1 meter may not be sufficient to eliminate noise.)
  - Remote controller (wireless kit) transmitting distance can be shorter than expected in rooms with electronic fluorescent lamps (inverter or rapid start types).  
Install the indoor unit as far away from fluorescent lamps as possible.
  - Do not install the air conditioner in the following locations:
    1. Where there is a high concentration of mineral oil spray or vapour (e.g. a kitchen).  
Plastic parts will deteriorate, parts may fall off and water leakage could result.
    2. Where corrosive gas, such as sulphurous acid gas, is produced.  
Corroding of copper pipes or soldered parts may result in refrigerant leakage.
    3. Near machinery emitting electromagnetic radiation.  
Electromagnetic radiation may disturb the operation of the control system and result in a malfunction of the unit.
    4. Where flammable gas may leak, where there is carbon fibre or ignitable dust suspensions in the air, or where volatile flammables such as paint thinner or gasoline are handled.  
Operating the unit in such conditions may result in fire.
  - The air conditioner is not intended for use in a potentially explosive atmosphere.
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## 2. BEFORE INSTALLATION








**Do not exert pressure on the resin parts when opening the unit or when moving it after opening. Be sure to check the type of R410A refrigerant to be used before doing any work. (Using an incorrect refrigerant will prevent normal operation of the unit.)**



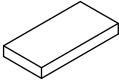
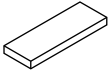




- When opening the unit or moving it after opening, be sure to lift it by holding on to the lifting lugs without exerting any pressure on other parts, especially, drain piping, and other resin parts.
- Decide upon a line of transport.
- Leave the unit inside its packaging while moving, until reaching the installation site. Use a sling of soft material, where unpacking is unavoidable or protective plates together with a rope when lifting, to avoid damage or scratches to the unit.
- Refer to the installation manual of the outdoor unit for items not described in this manual.
- Do not dispose of any parts necessary for installation until the installation is complete.
- In order to protect the indoor unit from damage, use packing materials to protect the unit after carrying until the installation starts.
- When selecting installation site, refer to the paper pattern.
- Do not use the unit in locations with high salt content in the air such as beachfront property, locations where the voltage fluctuates such as factories, or in automobiles or marine vessels.

### 1. ACCESSORIES

**Check the following accessories are included with your unit.**

(Do not dispose of any parts necessary for installation until the installation is completed.)

Name	(1) Drain hose	(2) Metal clamp	(3) Washer for hanger bracket	(4) Clamp	(5) Paper pattern for installation	(6) Screw (M4)	(7) Washer fixing plate
Quantity	1 pc.	1 pc.	8 pcs.	7 pcs.	1 pc.	4 pcs.	4 pcs.
Shape					Also used as packing material 	For paper pattern for installation 	

Name	Insulation for fitting	Sealing pad			Positioning jig for installation	(Other)	
Quantity	1 each	1 each		1 pc.	1 pc.		1 pc.
Shape	(8) for gas pipe  (9) for liquid pipe 	(10) Large  (11) Medium-1 	(12) Medium-2 	(13) Small 	(14) 	(15) 	<ul style="list-style-type: none"> <li>• Installation manual</li> <li>• Operation manual</li> <li>• Declaration of conformity</li> </ul>

## 2. OPTIONAL ACCESSORIES

- The optional decoration panel and remote controller are required for this indoor unit. (Refer to Table 1, 2)
- Check that the decoration panel is prepared.  
(For the installation of the decoration panel, refer to the installation manual attached to the decoration panel.)

Table 1

Unit model	Optional decoration panel
FCQG71·100·125·140EVEB	BYCP125B-W1
	Color : White

- Remote controllers: Select a remote controller from Table 2 according to customer request and install in an appropriate place.

Table 2

Remote controller	
Wired type	BRC1E51A7/BRC1D528

### FOR THE FOLLOWING ITEMS, TAKE SPECIAL CARE DURING CONSTRUCTION AND CHECK AFTER INSTALLATION IS FINISHED.

#### 1. Items to be checked after completion of work

Items to be checked	If not properly done, what is likely to occur	Check
Are the indoor unit and outdoor unit fixed firmly?	The unit may drop, vibrate or make noise.	
Is the installation of the indoor unit and the outdoor unit completed?	The unit may malfunction or the components burn out.	
Is the gas leak test finished?	It may result in insufficient cooling.	
Is the unit fully insulated?	Condensate water may drip.	
Does drainage flow smoothly?	Condensate water may drip.	
Does the power supply voltage correspond to that shown on the name plate?	The unit may malfunction or the components burn out.	
Are wiring and piping correct?	The unit may malfunction or the components burn out.	
Is the unit safely grounded?	It may result in electric shock.	
Is wiring size according to specifications?	The unit may malfunction or the components burn out.	
Is something blocking the air outlet or inlet of either the indoor or outdoor units?	It may result in insufficient cooling.	
Are refrigerant piping length and additional refrigerant charge noted down?	The refrigerant charge in the system is not clear.	

#### 2. Items to be checked at time of delivery

\* Also review the "1. SAFETY PRECAUTIONS"

Items to be checked	Check
Has the field setting done (as necessary)?	
Did you attach the control box lid, the air filter, and suction grille?	
Does the cold air (warm air) blow properly during the cooling (heating) operation?	
Did you explain about operations while showing the instruction manual to your customer?	
Did you hand the instruction manual over to your customer?	

## Points for explanation about operations

The items with **⚠ WARNING** and **⚠ CAUTION** marks in the instruction manual are the items pertaining to possibilities for bodily injury and material damage in addition to the general usage of the product. Accordingly, it is necessary that you make a full explanation about the described contents and also ask your customers to read the instruction manual.

### 3. NOTE TO THE INSTALLER

Be sure to instruct customers how to properly operate the unit (especially cleaning filters, operating different functions, and adjusting the temperature) by having them carry out operations themselves while looking at the manual.

### 3. SELECTING INSTALLATION SITE

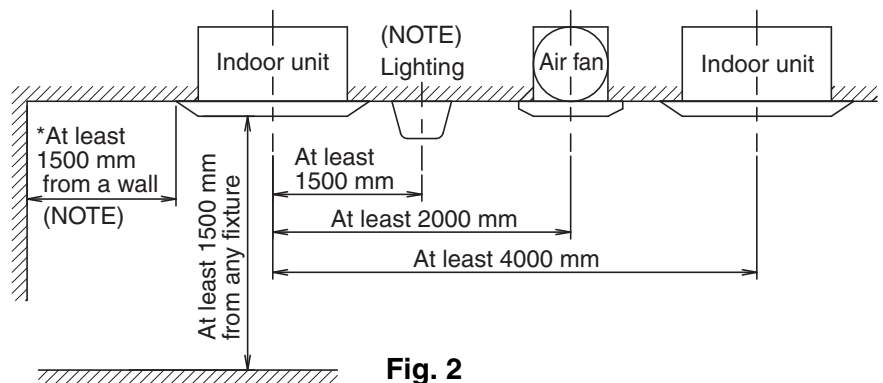
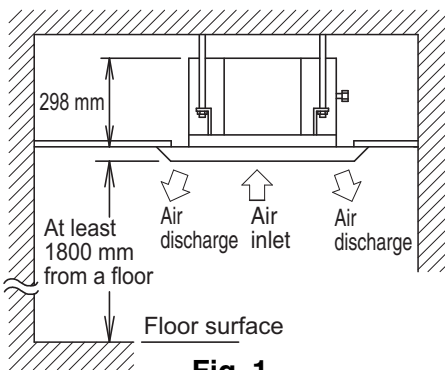
Please attach additional thermal insulation material to the unit body when it is believed that the relative humidity in the ceiling exceeds 80%. Use glass wool, polyethylene foam, or similar with a thickness of 10 mm or more as thermal insulation material.

The direction of air discharge for this product can be selected. Sealing Member of air discharge outlet is available option for 4-way with sealed corners, and 3-way.

**(1) Select an installation site where the following conditions are fulfilled and that meets your customer's approval.**

- Where optimum air distribution can be ensured.
- Where nothing blocks air passage.
- Where condensate can be properly drained.
- Where the ceiling is strong enough to bear the indoor unit weight.
- Where the false ceiling is not noticeably on an incline.
- Where sufficient clearance for maintenance and service can be ensured.
- Where there is no risk of flammable gas leakage.
- Where piping between indoor and outdoor units is possible within the allowable limit.  
(Refer to the installation manual for the outdoor unit.)

[Space required for installation]



#### ⚠ CAUTION

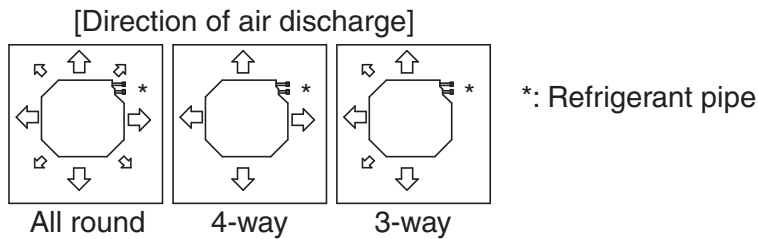
- Any vents, light fixtures, or other appliances which may disturb the airflow might cause the top side to become dirty if located too nearby, so follow Fig. 2 when installing.
- Keep indoor unit, outdoor unit, power supply wiring and transmission wiring at least 1 meter away from televisions and radios. This is to prevent image interference and noise in those electrical appliances. (Noise may be generated depending on the conditions under which the electric wave is generated, even if 1 meter is kept.)

#### (2) Ceiling height

- This indoor unit may be installed on ceilings up to 3.5 m (Type 100·125·140: 4.2 m) in height. However, it becomes necessary to make field settings by remote controller and close the air outlet when installing the unit at a height over 2.7 m (Type 100·125·140: 3.2 m).  
Refer to the section entitled, "11. FIELD SETTING" and the decoration panel installation manual.

### (3) Direction of the air discharge

- Select the number of directions of the optimum air discharge for the shape or the position of the room.
- Directions of the air discharge can be changed by installing a sealing material.
- When installing a sealing material, the field setting from the remote controller is required. For details, refer the operation manual attached to the sealing materials.



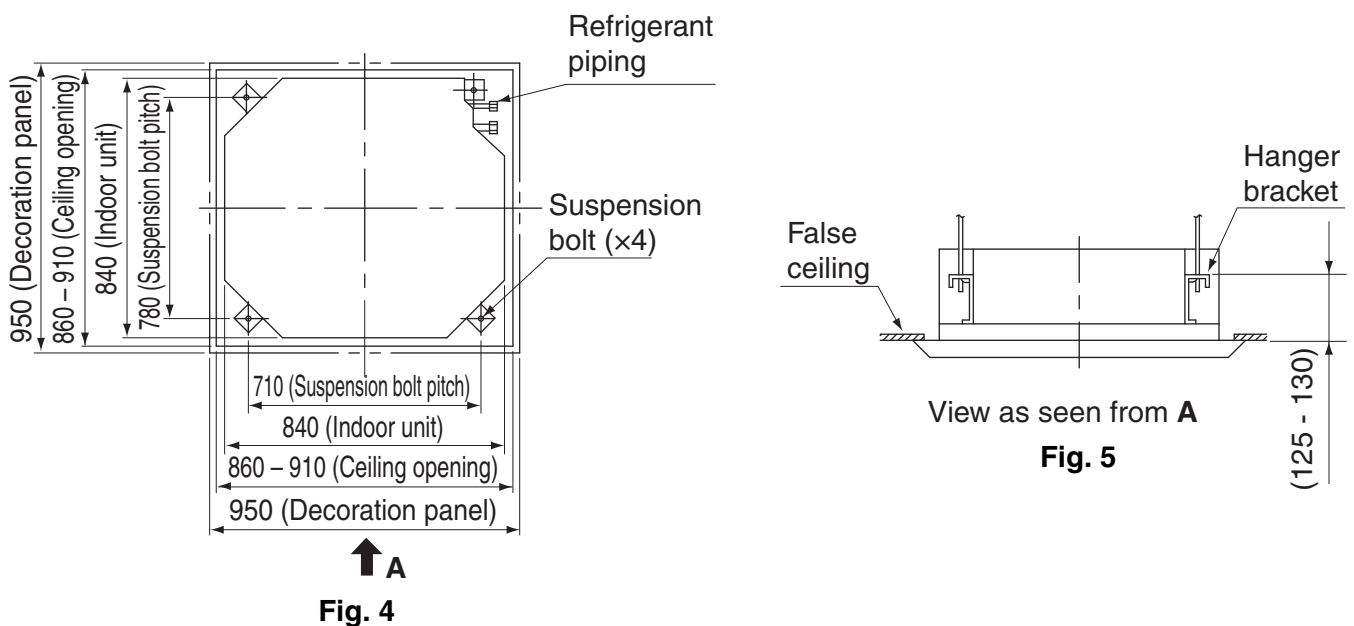
**Fig. 3**

### (4) Use suspension bolts for installation. Check whether the ceiling is strong enough to support the weight of the unit or not. If there is a risk, reinforce the ceiling before installing the unit.

(Installation pitch is maked on the paper pattern for installation. Refer to it to check for points requiring reinforcing.)

## 4. PREPARATIONS BEFORE INSTALLATION

### (1) Relation of ceiling opening to unit and suspension bolt position. Refer to Fig. 4 – 7. (Unit: mm)

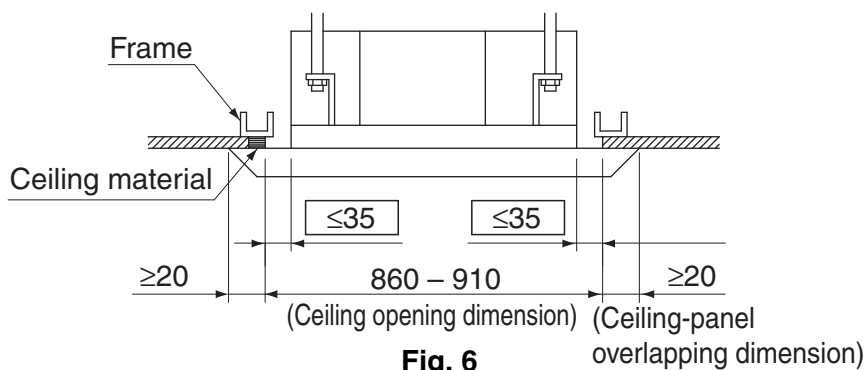


**Fig. 4**

**Fig. 5**

### ⚠ CAUTION

Reduce the distance between the unit and ceiling to 35 mm or below in order to maintain an overlapping panel margin of 20 mm for the opening on the ceiling. If the distance exceeds 35 mm, attach a ceiling material to the part marked or replace the ceiling (see Fig. 6).



**Fig. 6**



**(2) Make the ceiling opening needed for installation where applicable.** (For existing ceilings)

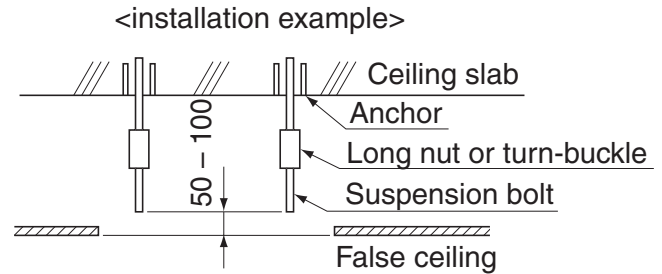
- Refer to the paper pattern for installation (5) for ceiling opening dimensions.
- Create the ceiling opening required for installation. From the side of the opening to the casing outlet, implement the refrigerant and drain piping and wiring for remote controller and indoor-outdoor unit casing outlet. Refer to “6. REFRIGERANT PIPING WORK”, “7. DRAIN PIPING WORK” and “8. ELECTRIC WIRING WORK”.
- After making an opening in the ceiling, it may be necessary to reinforce ceiling beams to keep the ceiling level and to prevent it from vibrating. Consult the builder for details.

**(3) Install the suspension bolts.**

(Use either a M8~M10 size bolt)

Use a hole-in anchor for existing ceilings, and a sunken insert, sunken anchor or other field supplied parts for new ceilings to reinforce the ceiling to bear the weight of the unit.

Adjust clearance (50 – 100 mm) from the ceiling before proceeding further.



**Fig. 7**

**NOTE** 

- All the above parts are field supplied.

## 5. INDOOR UNIT INSTALLATION

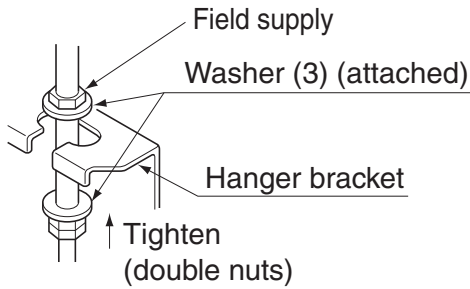
Installing optional accessories (except for the decoration panel) before installing the indoor unit is easier. However, for existing ceilings, install fresh air inlet component kit and branch duct before installing the unit.

As for the parts to be used for installation work, be sure to use the provided accessories and specified parts designated by our company.

### (1) For new ceilings

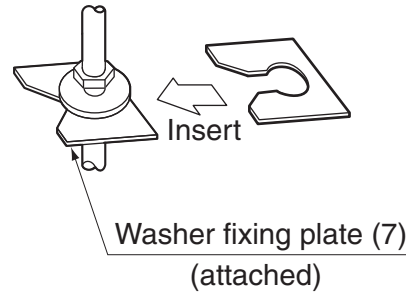
#### (1-1) Install the indoor unit temporarily.

- Attach the hanger bracket to the suspension bolt. Be sure to fix it securely by using a nut and washer (3) from the upper and lower sides of the hanger bracket.  
The washer fixing plate (7) will prevent the washer from falling.



[Securing the hanger bracket]

**Fig. 8**



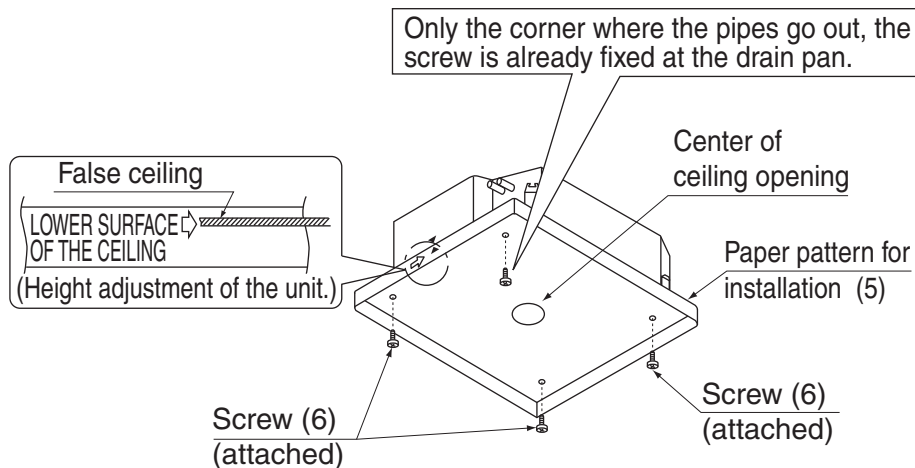
[Securing the washer]

**Fig. 9**

#### (1-2) Refer to the paper pattern for installation (5) for ceiling opening dimension.

Consult the builder or carpenter for details.

- The center of the ceiling opening is indicated on the paper pattern for installation.  
The center of the unit is indicated on the triangular mark to the unit bottom and on the paper pattern for installation.
- Fix the paper pattern to the unit with screws (6) (×4).
- Ceiling height is shown on the side of the paper pattern for installation (5). Adjust the height of the unit according to this indication.



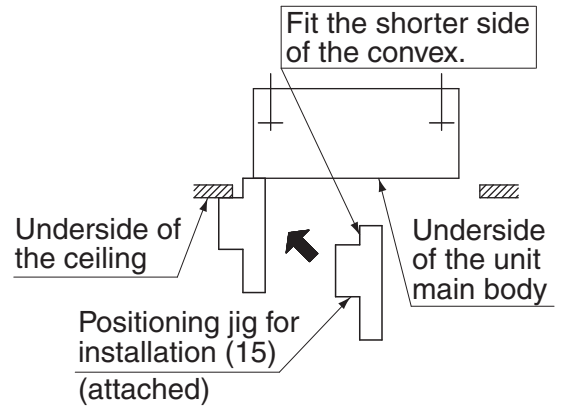
**Fig. 10**

[Installation of paper pattern for installation]

**<Ceiling work>**

**(1-3)** Adjust the unit to the right position for installation.  
 (Refer to “4. PREPARATIONS BEFORE INSTALLATION-(1)”.)

- At this time, using the positioning jig for installation (15) allows to confirm the position from under surface of the unit to under surface of the ceiling.



**Fig. 11**

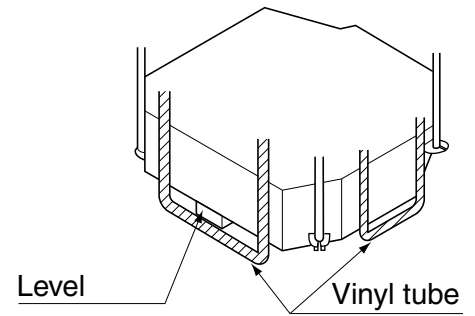
**(1-4)** Check the unit is horizontally level.

**CAUTION**

- The indoor unit is equipped with a built-in drain pump and float switch. Verify that it is level by using a level or a water-filled vinyl tube.  
 (If the unit is tilted against condensate flow, the float switch may malfunction and cause water to drip.)

**(1-5)** Remove the washer fixing plate (7) used for preventing the washer from falling and tighten the upper nut.

**(1-6)** Remove the paper pattern for installation (5).



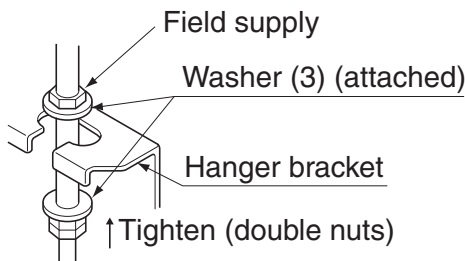
[Maintaining horizontality]

**Fig. 12**

**(2) For existing ceilings**

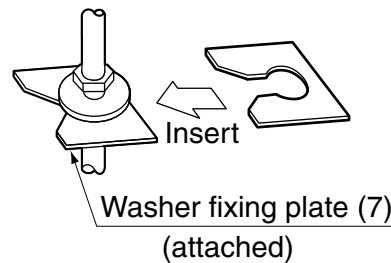
**(2-1)** Install the indoor unit temporarily.

- Attach the hanger bracket to the suspension bolt. Be sure to fix it securely by using nut and washer from upper/lower sides of hanger bracket. If you use the washer fixing plate (7), it will prevent the falling of the washer.



[Securing the hanger bracket]

**Fig. 13**



[Securing the washer]

**Fig. 14**

**(2-2)** Adjust the height and position of the unit.

(Refer to “4. PREPARATIONS BEFORE INSTALLATION-(1)”.)

**(2-3)** Perform steps (1-4), (1-5) in (1) For new ceilings.

## 6. REFRIGERANT PIPING WORK

⟨For refrigerant piping of outdoor units, see the installation manual attached to the outdoor unit.⟩

⟨Execute thermal insulation work completely on both sides of the gas piping and the liquid piping. Otherwise, a water leakage can result sometimes.⟩

⟨When using a heat pump, the temperature of the gas piping can reach up to approximately 120°C, so use insulation which is sufficiently resistant.⟩

⟨Be sure to check the type of R410A refrigerant to be used before doing any work. (Using an incorrect refrigerant will prevent normal operation of the unit.⟩

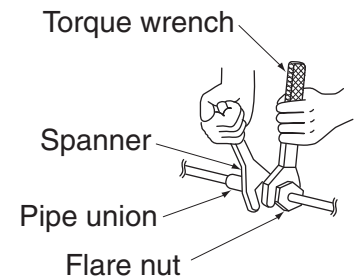
### ⚠ CAUTION

- Use a pipe cutter and flare suitable for the type of R410A refrigerant.
- Apply ester oil or ether oil around the flare section before connecting.
- Use the flare nut provided to the unit. Do not use a different flare nut (class 1), or otherwise refrigerant leakage may result.
- To prevent dust, moisture or other foreign matter from infiltrating the tube, either pinch the end or cover it with tape.
- Do not allow anything other than the designated refrigerant to get mixed into the refrigerant circuit, such as air, etc. If any refrigerant gas leaks while working on the unit, ventilate the room thoroughly right away.

- The outdoor unit is charged with refrigerant.
- Be sure to use both a spanner and torque wrench together, as shown in the drawing, when connecting or disconnecting pipes to/from the unit.

**(Refer to Fig. 15)**

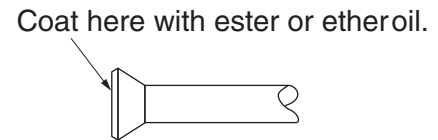
- Refer to "Table 3" for the dimensions of flare nut spaces.
- Use the flare nut included with the unit main body.



**Fig. 15**

- When connecting the flare nut, apply ester oil or ether oil to the inside of the flare section, and spin 3-4 times before screwing in.

**(Refer to Fig. 16)**



**Fig. 16**

### ⚠ CAUTION

- Overtightening may damage the flare and cause a refrigerant leakage.
- Do not let oil get on the screw holders on the dressing board. Oil can weaken the screw holders.

Table 3

Pipe size	Tightening torque	Flare dimensions A (mm)	Flare
φ 9.5 (3/8")	32.7 – 39.9 N·m	12.8 – 13.2	
φ 15.9 (5/8")	61.8 – 75.4 N·m	19.3 – 19.7	

### ⚠ CAUTION

- Be careful not to damage the flare section.
- Refer to "Table 3" to determine the proper tightening torque.

— **Not recommendable but in case of emergency** —

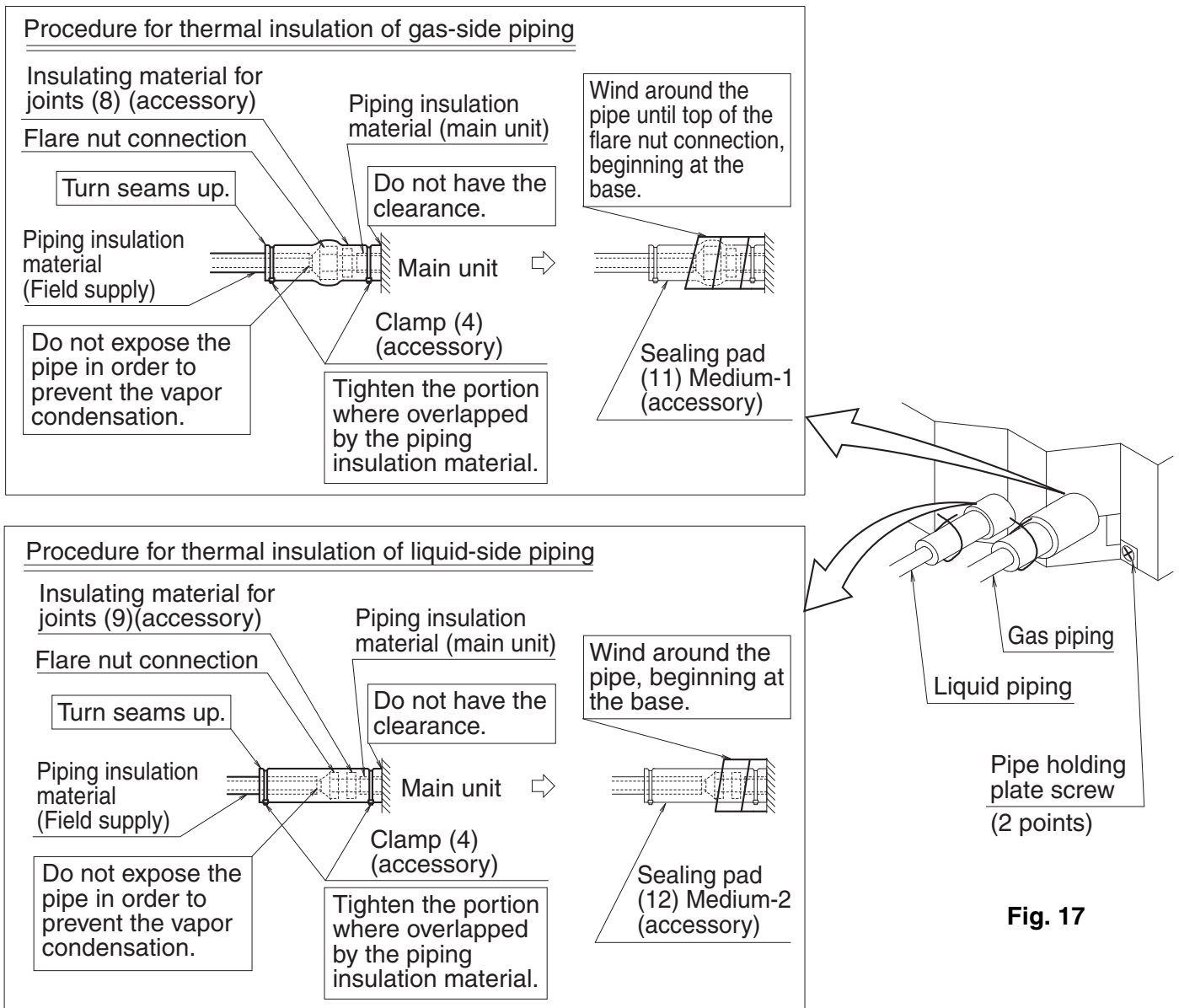
You must use a torque wrench but if you are obliged to install the unit without a torque wrench, you may follow the installation method mentioned below.

**After the work is finished, make sure to check that there is no gas leak.**

When you keep on tightening the flare nut with a spanner, there is a point where the tightening torque suddenly increases. From that position, further tighten the flare nut the angle shown below:  
Unless followed the tightening instruction (it is loose tightening), it will lead to the refrigerant leakage (slow leak) and the device malfunction (it does not sufficiently cool or heat).

Pipe size	Further tightening angle	Recommended arm length of tool
φ 9.5 (3/8")	60 to 90 degrees	Approx. 200mm
φ 15.9 (5/8")	30 to 60 degrees	Approx. 300mm

- Make absolutely sure to execute thermal insulation works on the pipe-connecting section after checking gas leakage by thoroughly studying the following figure and using the attached heat insulating materials for fitting (8) and (9). (Fasten both ends with the clamps (4).) **(Refer to Fig. 17)**
- Wrap the sealing pad (11) only around the insulation for the joints on the gas piping side. **(Refer to Fig. 17)**
- Wind round the insulation for fitting (8) and (9) in the flare nut of the liquid and gas pipe joints by the sealing pad-Medium 1 (11) and 2 (12).
- Be sure to turn up the seams of the insulation for fitting (8) and (9).
- At brazing of the refrigerant piping, complete the nitrogen substitution first, or braze with charging the nitrogen into the refrigerant pipe (Refer to Fig. 4), lastly connect the flare nut to the indoor unit (Refer to Fig. 3).



**Fig. 17**

**⚠ CAUTION**

For local insulation, be sure to insulate local piping all the way into the pipe connections inside the machine.  
 Exposed piping may cause condensation or burns on contact.

**⚠ CAUTION**

**• CAUTION TO BE TAKEN WHEN BRAZING REFRIGERANT PIPING**

Do not use flux when brazing refrigerant piping. Therefore, use the phosphor copper brazing filler metal (BCuP-2: JIS Z 3264/B-Cu93P-710/795: ISO 3677) which does not require flux.

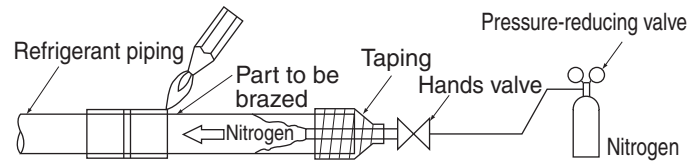
(Flux has extremely harmful influence on refrigerant piping systems. For instance, if the chlorine based flux is used, it will cause pipe corrosion or, in particular, if the flux contains fluorine, it will damage the refrigerant oil.)

- Before brazing local refrigerant piping, nitrogen gas shall be blown through the piping to expel air from the piping.

If you brazing is done without nitrogen gas blowing, a large amount of oxide film develops inside the piping, and could cause system malfunction.

- When brazing the refrigerant piping, only begin brazing after having carried out nitrogen substitution or while inserting nitrogen into the refrigerant piping. Once this is done, connect the indoor unit with a flared or a flanged connection.

- When the airtight test is performed for the indoor unit and inter-unit piping after indoor unit installation, be sure to refer to the installation manual for the indoor unit or technical guide for airtight pressurization and refrigerant piping installation.
- Shortage of refrigerant due to air purge or losing the additional refrigerant charging may cause the failure of the unit (does not sufficiently cool or heat).  
Be sure to refer the installation manual or the engineering guide for the outdoor unit at the refrigerant piping work.
- Nitrogen should be set to 0.02MPa with a pressure-reducing valve if brazing while inserting nitrogen into the piping. **(Refer to Fig. 18)**



**Fig. 18**



**CAUTION**

- Do not use anything such as the oxidation inhibitor when brazing. (Residues may result in the clogging pipe or parts damage.)

## 7. DRAIN PIPING WORK

### (1) Rig drain piping

- As for drain work, perform piping in such a manner that water can be drained properly.
- Employ a pipe with either the same diameter or with the diameter larger (excluding the raising section) than that of the connecting pipe (PVC pipe, nominal diameter 25 mm, outside diameter 32 mm).
- Keep the drain pipe short and sloping downwards at a gradient of at least 1/100 to prevent air pockets from forming.
- If the drain pipe cannot be sufficiently set on a slope, execute the drain raising piping.
- To keep the drain pipe from sagging, space hanging wires every 1 to 1.5 m.

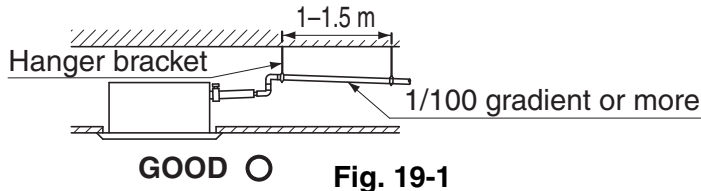


Fig. 19-1

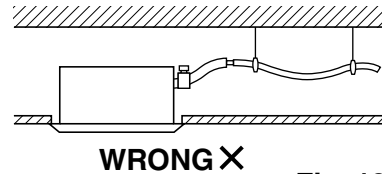


Fig. 19-2



### CAUTION

Water accumulating in the drain piping can cause the drain to clog.

- Use the attached drain hose (1) and Metal clamp (2).
- Connect the drain hose (1) to the stage part of the drain socket and securely tighten the metal clamp (2) with the tape on the insertion end of the hose.  
Tighten the screw of the metal clamp (2) until the remainder will become 4 mm or less.
- Wrap the attached sealing pad (10) over the Metal clamp (2) and drain hose to insulate.
- Make sure that thermal insulation work is executed on the following 2 spots to prevent any possible water leakage due to dew condensation.
  - Indoor drain pipe
  - Drain socket

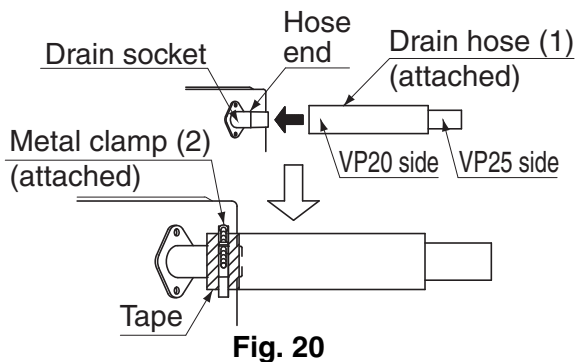


Fig. 20

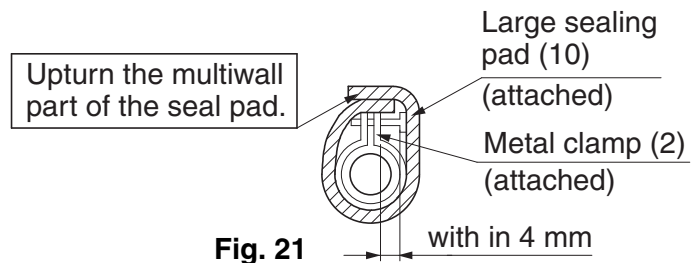
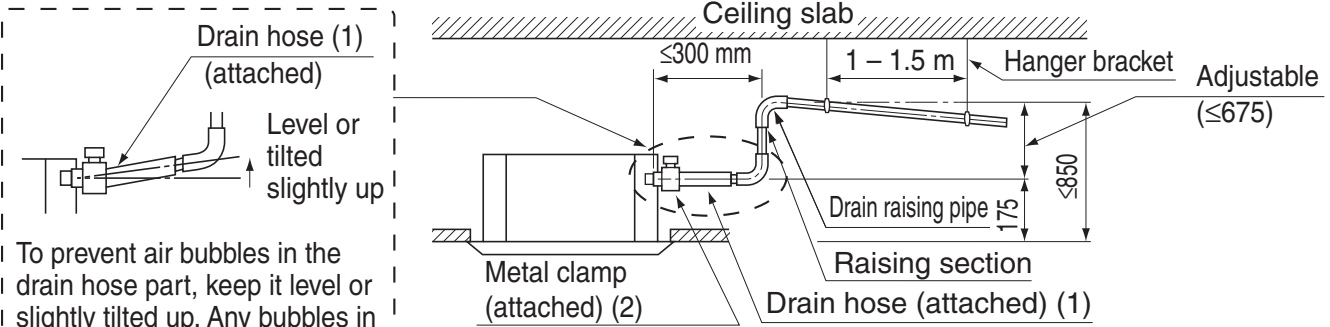


Fig. 21



**<PRECAUTIONS FOR DRAIN RAISING PIPING>**

- Install the drain raising pipes at a height of less than 675 mm.  
The drain pump of this unit has a high delivery flow rate. Therefore, the higher the drain raising height is, the lower the sound of draining will be. For this reason, a minimum drain raising height of 300 mm is recommended.
- Install the drain raising pipes at a right angle to the indoor unit and no more than 300 mm from the unit.

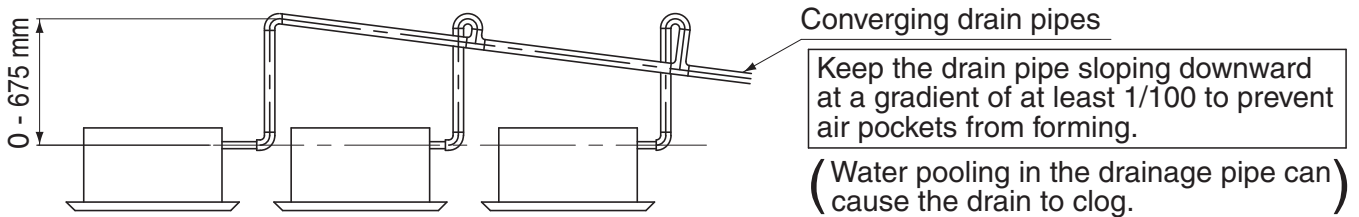


**Fig. 22**

To prevent air bubbles in the drain hose part, keep it level or slightly tilted up. Any bubbles in the hose might cause the unit to make noise due to backflow when the drain pump stops.

**NOTE**

- To ensure no excessive pressure is applied to the included drain hose (1), do not bend or twist when installing. (This may cause leakage.)
- If converging multiple drain pipes, install according to the procedure shown below.



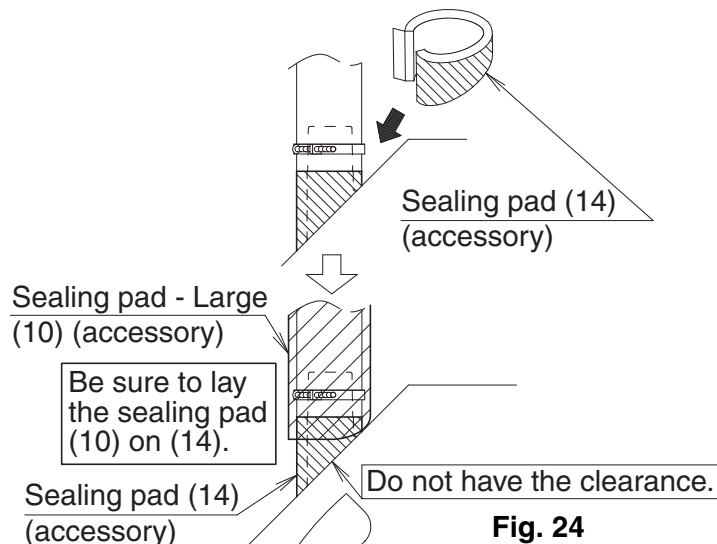
**Fig. 23**

Select converging drain pipes whose gauge is suitable for the operating capacity of the unit.

(2) After piping work is finished, check if drainage flows smoothly.

**WHEN ELECTRIC WIRING WORK IS FINISHED**

- Add approximately 1 L of water slowly from the air outlet and check drainage flow.  
Check drainage flow during COOL running, explained under “12. TEST OPERATION”.
- After checking the drainage of water, refer to Fig. 24 and attach the sealing pad (14) to perform the thermal insulation of the drain socket.



**Fig. 24**

## WHEN ELECTRIC WIRING WORK IS NOT FINISHED

### CAUTION

---

- Electrical wiring work should be done by a certified electrician.
  - If someone who does not have the proper qualifications performs the work, perform the following after the test run is complete.
- 
- Remove the control box lid. Connect the single phase power supply (SINGLE PHASE 50Hz 220-240V, 60Hz 220V) to connections No.1 and No.2 on the terminal block for wiring the units. Do not connect to No.3 of the terminal block for wiring the units. (The drain pump will not operate.) Connect the earth wire firmly. When carrying out wiring work around the control box, make sure none of the connectors come undone. Be sure to attach the control box lid before turning on the power.
  - Put approximately 1L of water slowly into the drain pan through the outlet on the left side of the drain socket. Make sure not to pour water over the drain pump or any electric parts including those of the drain pump.
  - When the power is turned on, the drain pump will operate and you can check the draining of water through the transparent part of the drain socket. (The drain pump will stop automatically in 10 minutes.) After checking the drainage of water, wrap the sealing pad (14) to the drain socket so that thermal insulate the drain socket.
  - After confirming drainage (**Fig. 25, Fig. 26**), turn off the power and remove the power supply.
  - Attach the control box lid as before.

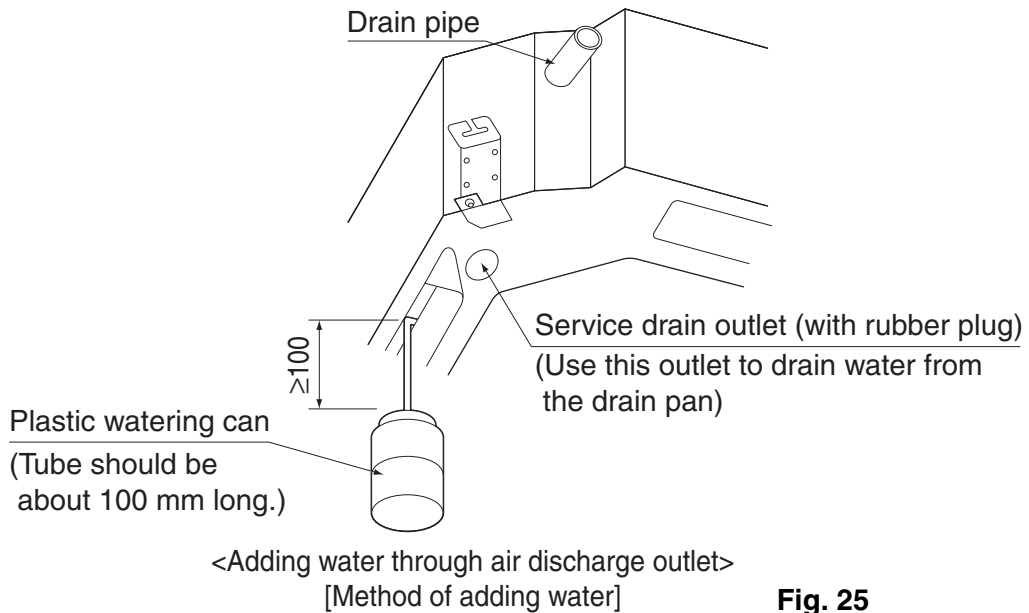


Fig. 25

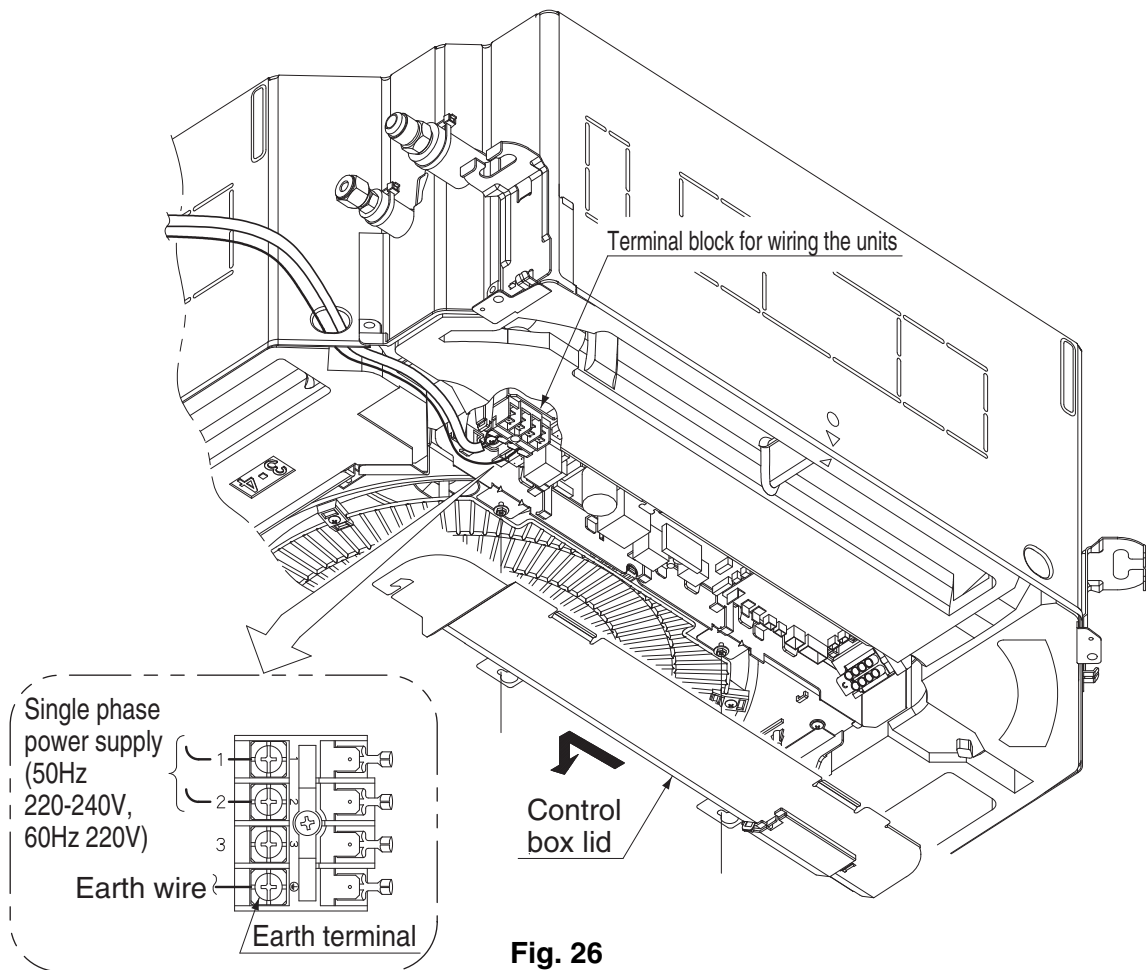


Fig. 26

**CAUTION**

**Drain piping connections**

Do not connect the drain piping directly to sewage pipes that smell of ammonia. The ammonia in the sewage might enter the indoor unit through the drain pipes and corrode the heat exchanger.

## 8. ELECTRIC WIRING WORK

- Electric wiring work must be conducted by electrician authorized by power companies. (Only licensed electrician can conduct electric work and earth connections.)
- All wiring must be performed by an authorized electrician.
- A circuit breaker capable of shutting down power supply to the entire system must be installed.
- Be sure to install an earth leakage circuit breaker to the outdoor unit.  
(This installation of an earth leakage circuit breaker is mandatory for the prevention of electric shocks and fire disasters.)
- Make sure that 220-240V is specified wiring between the indoor and outdoor units and between indoor units.
- Do not turn on the power supply (of the indoor unit) until all the installation work is completed.
- Be sure to ground the air conditioner.
- Refer to the installation manual attached to the outdoor unit for the size of power supply electric wire connected to the outdoor unit, the capacity of the circuit breaker and switch, and wiring instructions.
- Do not connect the earth wire to gas pipes, plumbing pipes, lightning rods, or telephone earth wires.
  - Gas pipes: might cause explosions or fire if gas leaks.
  - Plumbing: no earth effect if hard vinyl piping is used.
  - Telephone earth wires or lightning rods: might cause abnormally high electric potential in the earth during lightning storms.
- For electric wiring work, refer to also "WIRING DIAGRAM" attached to the unit body.
- Never connect the power supply wire to the terminal block for remote controller wire, or otherwise the entire system may be damaged.
- For remote controller wiring details, refer to the installation manual attached to the remote controller.
- Do not touch the printed circuit board ASSY during the wiring work. Otherwise, it may cause damage.

### • Specifications for field wire

Refer to the installation manual attached to the outdoor unit regarding the detail of standard accessories for the outdoor unit.

The remote control cord should be procured locally. Refer to the Table 4 when preparing one.

Wiring specifications are shown on the condition that the wiring has a voltage drop of 2%.

Table 4

	Wire	Size (mm <sup>2</sup> )	Length
Wiring the units	H05VV – U4G (NOTE 1)	2.5	–
Remote controller cord	Vinyl cord with sheath or cable NOTE 2 (2 wire)	0.75 – 1.25	Max. 500 m *

\*This will be the total extended length in the system when doing group control.

### NOTE

1. Shows only in case of protected pipes. Use H07RN-F in case of no protection.
2. Vinyl cord with sheath or cable (Insulated thickness : 1mm or more)

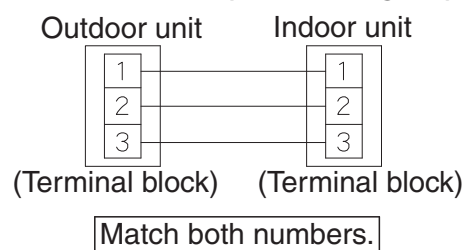
### Connection of wiring between units, earth wire and for the remote controller cord (Refer to Fig. 28)

#### • Wiring the units and earth wire

Remove the control box lid and connect wires of matching number to the terminal block for wiring the units (4 P) inside. And connect the earth wire to the earth terminal. In doing this, pull the wires inside through the hole and fix the wires securely with the included clamp (4).

#### • Remote controller cords

Remove the control box lid and pull the wires inside through the hole and connect to the terminal block for remote controller. (no polarity)  
Securely fix the remote controller cord with the included clamp (4).



How to connect the connection pipe

- Protect the wire and the wiring through hole area for wirings of the transmission, earth and the remote controller in order to prevent the intrusion of water and small animals into the air conditioner after the system is wired.
- Halve the sealing pad - small (13), then wind round each one to the respective wiring lines.
- After all the wiring connections are done, fill in any gaps in the through holes with putty or insulation (procured locally) to prevent small animals and insects from entering the unit from outside. (If any do get in, they could cause short circuits in the control box.)
- Outside the machine, separate the weak wiring (remote controller cord) and strong wiring (interunit, earth, and other power wiring) at least 50 mm so that they do not pass through the same place together. Proximity may cause electrical interference, malfunctions, and breakage.

[Processing method of wiring through hole]

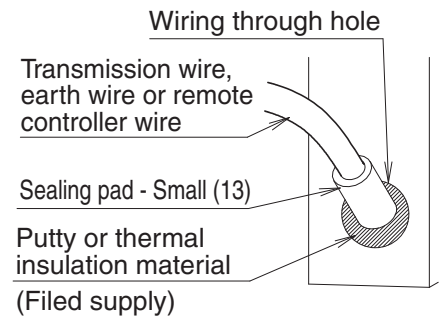


Fig. 27

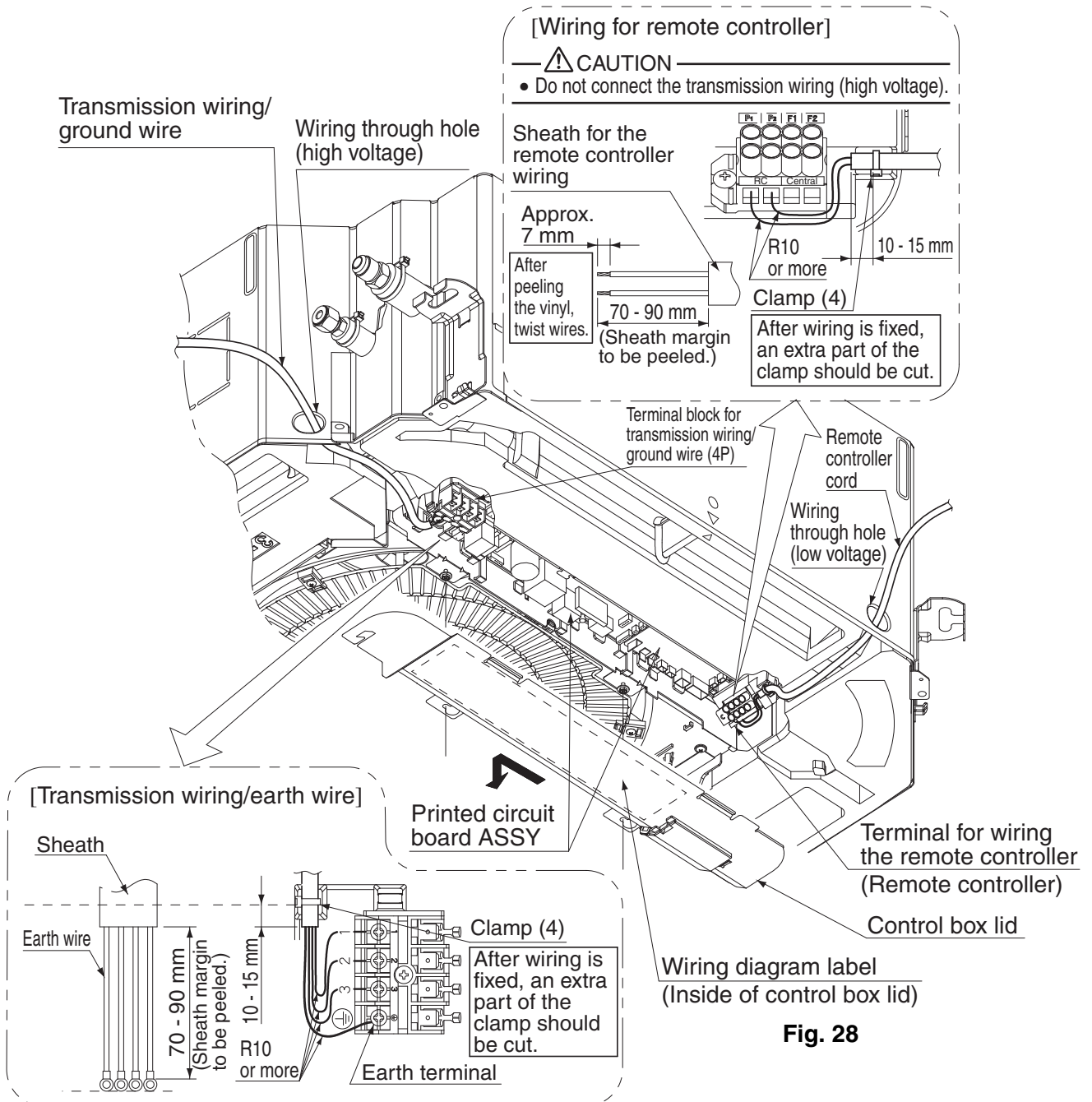


Fig. 28

**CAUTION**

- Shape the wires and attach the control box lid securely so that wires will not be caught. (Caught wires and risen lid may cause an electric shock or fire.)

## Precautions to be taken for power supply wiring

Use a round crimp-style terminal for connection to the power supply terminal block.

In case it cannot be used due to unavoidable reasons, be sure to observe the following instructions.

(Refer to Fig. 29)

- Do not connect wires of different gauge to the same power supply terminal. (Looseness in the connection may cause overheating.) (Refer to Fig. 30)
- When connecting wires of the same gauge, connect them according to. (Refer to Fig. 30)
- In wiring, make certain that prescribed wires are used, carry out complete connections, and fix the wires so that external forces are not applied to the terminals.

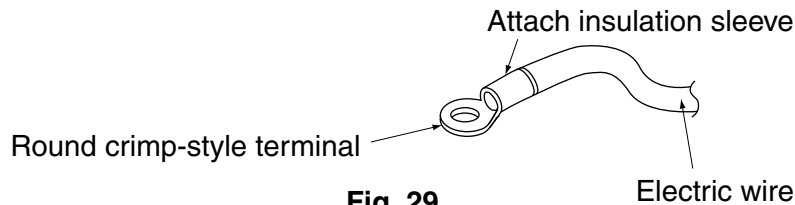
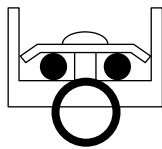


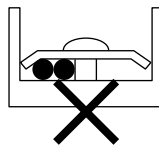
Fig. 29

Connect wires of the same gauge to both side. (GOOD)



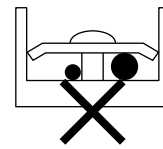
Good

Do not connect wires of the same gauge to one side. (WRONG)



Wrong

Do not connect wires of different gauges. (WRONG)



Wrong

Fig. 30

## Tightening torque for the terminal screws.

- Use the correct screwdriver for tightening the terminal screws. If the blade of screwdriver is too small, the head of the screw might be damaged, and the screw will not be properly tightened.
- If the terminal screws are tightened too hard, screws might be damaged.

Refer to the table below for the tightening torque of the terminal screws.

Tightening torque (N·m)	
Terminal block for remote controller	0.79 to 0.97
Terminal block for wiring the units	1.18 to 1.44
Earth terminal	1.18 to 1.44

- If the strand wire is used, do not solder it.

## 9. WIRING EXAMPLE

### ⚠ CAUTION

Be sure to install an earth leakage breaker to the outdoor unit.

Installation of an earth leakage breaker is mandated to avoid electric shocks or fire.

For the wiring of outdoor units, refer to the installation manual attached to the outdoor units.

### Confirm the system type.

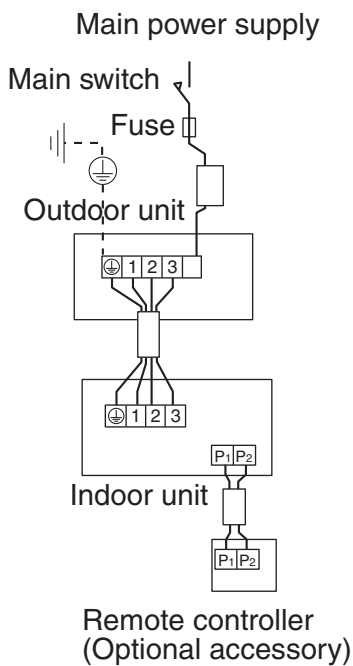
- **Pair type:** 1 remote controller controls 1 indoor unit. (standard system) (Refer to Fig. 31)
- **Group control:** 1 remote controller controls up to 16 indoor units. (All indoor units operate according to the remote controller) (Refer to Fig. 32)
- **2 remote controllers control:** 2 remote controllers control 1 indoor unit. (Refer to Fig. 34)

### <Usage Restriction of Cord>

Do not use cords for the transmission wiring.

Ex: VCTF (not allowed), VV cable (allowed)

**Pair type**

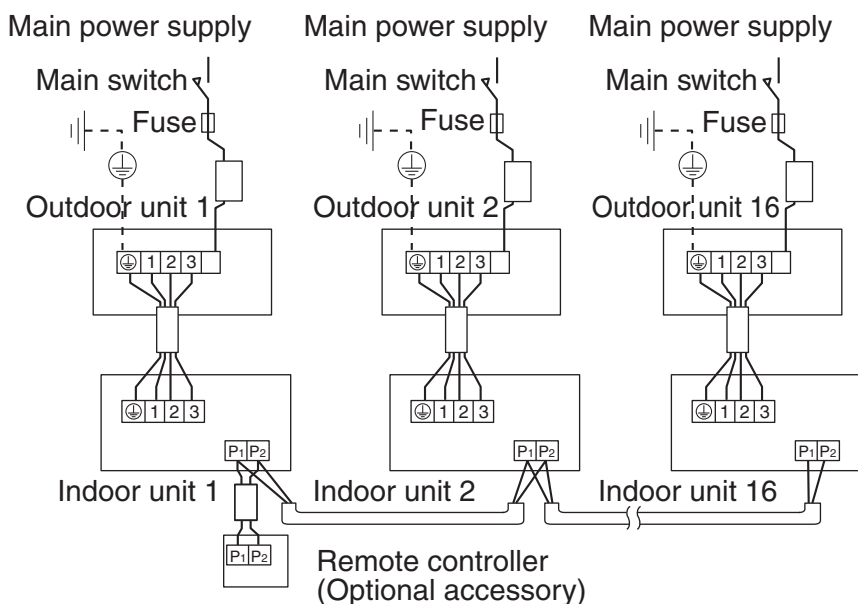


**Fig. 31**

Standard wiring accessories

Single-phase supply	Model	Indoor unit		
		Earth wire (copper)	Connection pipe between indoor unit and outdoor unit	
			Minimum thickness	Length
	FCQG71EVEB	≥2.0 mm <sup>2</sup> φ1.6	2.0 mm <sup>2</sup> φ1.6	≥50 m

**Group control**



**Fig. 32**

	Wire	Size (mm <sup>2</sup> )	Length
Wiring the units	H05VV – U4G (NOTE 1)	2.5	–
Remote controller cord	Vinyl cord with sheath or cable NOTE 2 (2 wire)	0.75 – 1.25	Max. 500 m *

## When implementing group control

- When using as a pair unit or as a parent unit for simultaneous operation multi, you may simultaneous start/stop (group) control up to 16 unit with the remote controller.
- In this case, all the indoor units in the group will operate in accordance with the group control remote controller.

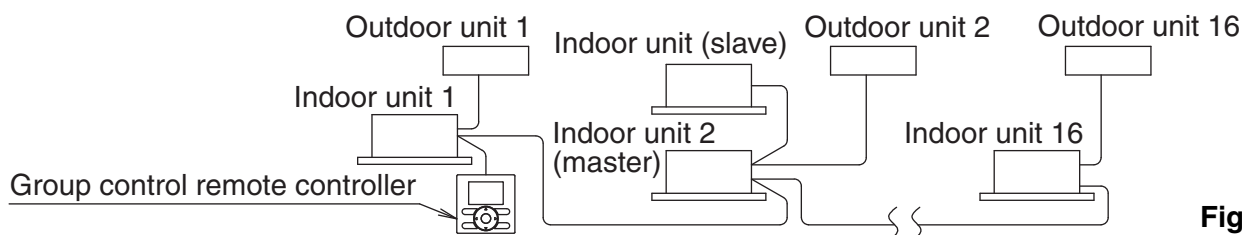


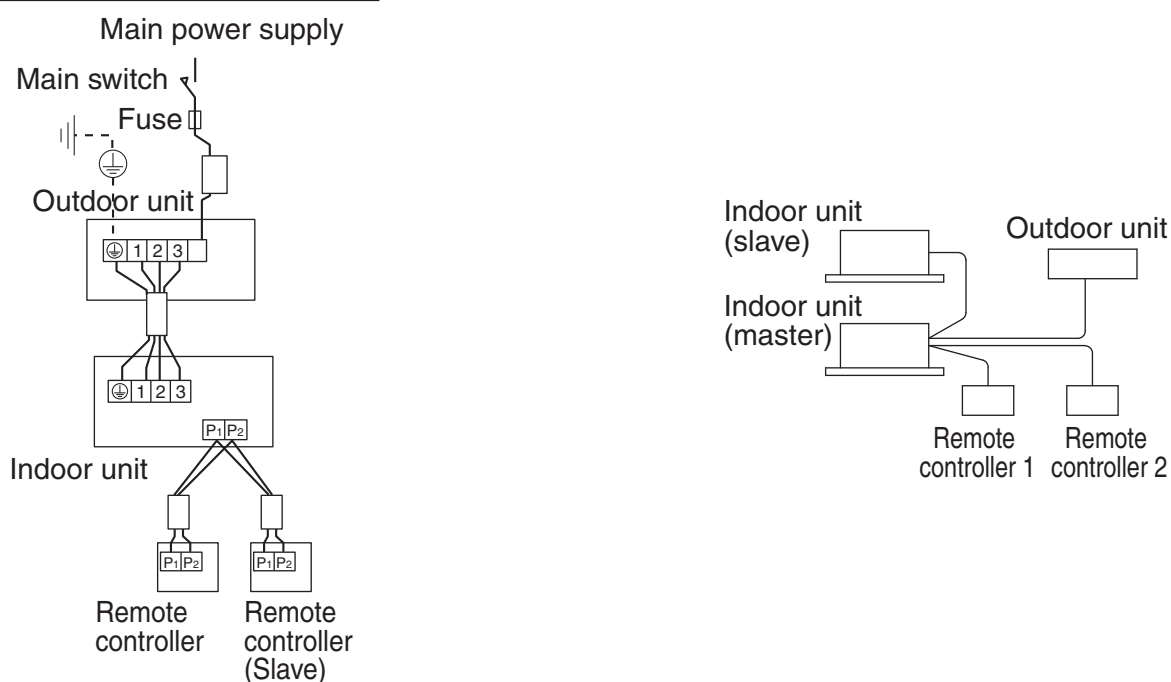
Fig. 33

## Wiring Method

(1) Remove the control box lid. (See “8. ELECTRIC WIRING WORK”.)

(2) **Cross-wire the terminal block for remote controller (P<sub>1</sub> P<sub>2</sub>) inside the control box. (There is no polarity.) (Refer to Fig. 32 and Table 4)**

### 2 remote controllers control



(Optional accessories) Fig. 34

## Two remote controllers control (Controlling 1 indoor unit by 2 remote controllers)

- When using 2 remote controllers, one must be set to “MAIN” and the other to “SUB”.

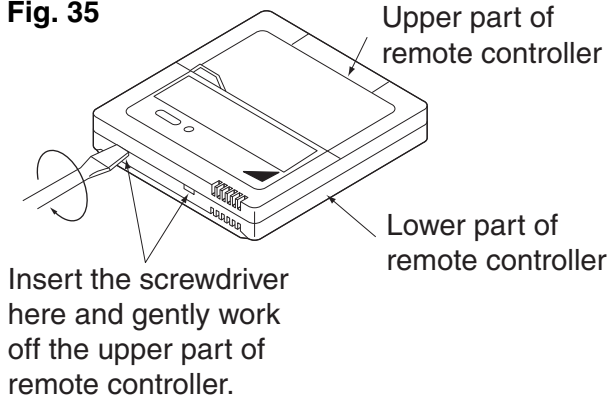
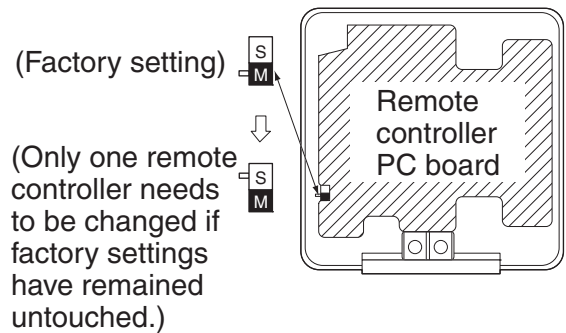
## MAIN/SUB CHANGEOVER

- The settings of the BRC1E51A7 remote controller should be switched while referring to the manual supplied with the remote controller.

The settings of the BRC1D528 remote controller should be switched in accordance with the following procedure.

- (1) Insert a ⊖ screwdriver into the recess between the upper and lower part of remote controller and, working from the 2 positions, pry off the upper part. (The remote controller PC board is attached to the upper part of remote controller.) (Refer to Fig. 35)
- (2) Turn the **main/sub changeover** switch on one of the two remote controller PC boards to “S”. (Leave the switch of the other remote controller set to “M”.) (Refer to Fig. 36)



**Fig. 35****Fig. 36****Wiring Method** (See “8. ELECTRIC WIRING WORK”)**(3)** Remove the control box lid**(4)** Add remote controller 2 (slave) to the terminal block for remote controller (P<sub>1</sub>, P<sub>2</sub>) in the control box. (There is no polarity.) (Refer to Fig. 33 and Table 4)**NOTE**

1. All transmission wiring except for the remote controller wires is polarized and must match the terminal symbol.
2. In case of group control, perform the remote controller wiring to the master unit when connecting to the simultaneous operation system. (wiring to the slave unit is unnecessary)
3. For group control remote controller, choose the remote controller that suits the indoor unit which has the most functions (as attached swing flap)

**10. INSTALLATION OF THE DECORATION PANEL**

&lt;Read “12. TEST OPERATION” before making a test run without attaching the decorated panels.&gt;

- Refer to the installation manual attached to the decoration panel.
- After installing the decoration panel, ensure that there is no space between the unit body and decoration panel.
- When making a test run before installation of the decoration panel, be sure to check the operation of the swing flap after the installation.

**11. FIELD SETTING**

- Be sure to check that the outdoor unit has been wired.
- Make sure the control box lids are closed on the indoor and outdoor units.  
<Field setting must be made from the remote controller and in accordance with installation conditions.>
- Setting can be made by changing the “Mode No”, “FIRST CODE NO.” and “SECOND CODE NO.”.
- For setting procedures and instructions, see “Field settings” provided with the remote controller.  
\*Settings are done in a batch for the group. To make or confirm settings for an individual unit, set the Mode No. shown in parentheses.
- Do not set numbers unless mentioned in the table.

**11-1 Setting ceiling height**

- Select the SECOND CODE NO. that corresponds to the ceiling height “Table 5”.  
(SECOND CODE NO. is factory set to “01” for a ceiling height of less than 2.7m.)

Table 5

Setting	Ceiling height (m)		Mode No. *	FIRST CODE NO.	SECOND CODE NO.
	FCQG71EVEB	FCQG100·125·140EVEB			
Standard-All round	Less than 2.7 m	Less than 3.2m	13 (23)	0	01
High ceiling 1	More than 2.7 m; 3.0 m or less	More than 3.2m; 3.6m or less			02
High ceiling 2	More than 3.0 m; 3.5 m or less	More than 3.6m; 4.2m or less			03

**NOTE**

- “Mode No.” setting is done in a batch for the group. To make or confirm settings for an individual unit, set the Mode No. shown in parentheses.
- The figure of the ceiling height is for the all round outlet.

**11-2 Setting of air direction**

- Refer the attached installation manual with the optional sealing member of air discharge outlet, for setting of air direction (4-way with sealed corners, or 3-way).

(The setting position No. is 01 “Standard-All round” as factory setting.)

See the installation manual included with the sealing material of air discharge outlet kit, sold separately and technical guide, for ceiling height settings for two and three-direction air discharge.

**11-3 Setting of air volume when Thermostat Control is OFF**

- Before setting Thermostat Control, consult with the customer regarding whether that is responding to their environment.

(SECOND CODE NO. is “02” at Cooling Thermostat OFF and others are “01” as factory setting.)

Table 6

Setting		Mode No. *	FIRST CODE NO.	SECOND CODE NO.
Fan stops at Thermostat OFF (Cooling/Heating)	Normal	11 (21)	2	01
	Stop			02
Air volume at Cooling Thermostat OFF	LL	12 (22)	6	01
	Setup volume			02
Air volume at Heating Thermostat OFF	LL	12 (22)	3	01
	Setup volume			02

**NOTE**

- “Mode No.” setting is done in a batch for the group. To make or confirm settings for an individual unit, set the Mode No. shown in parentheses.

**11-4 Setting air filter sign**

- Remote controllers are equipped with liquid crystal display air filter signs to display the time to clean air filters.

- Change the SECOND CODE NO. according to “Table 7” depending on the amount of dirt or dust in the room.

(SECOND CODE NO. is factory set to “01” for filter contamination-light.)

Table 7

Setting	Spacing time of display air filter sign (long life type)	Mode No. *	FIRST CODE NO.	SECOND CODE NO.
Air filter contamination-light	Approx. 2500 hrs	10 (20)	0	01
Air filter contamination-heavy	Approx. 1250 hrs			02
No display (Note 2)			3	

**NOTE** 

1. “Mode No.” setting is done in a batch for the group. To make or confirm settings for an individual unit, set the Mode No. shown in parentheses.
2. Make settings for “No display” in cases where no cleaning display is required, e.g., at the time of regular maintenance servicing.

### 11-5 Settings for Mounting Options

- When installing an option sold separately, refer to the operation manual attached to the option.

## 12. TEST OPERATION





- The settings of the BRC1E51A7 remote controller should be switched while referring to the manual supplied with the remote controller.  
The settings of the BRC1D528 remote controller should be switched in accordance with the following procedure.

**(1) Make sure the control box lids are closed on the indoor and outdoor units.**

**(2) Refer to the section of “FOR THE FOLLOWING ITEMS, TAKE SPECIAL CARE DURING CONSTRUCTION AND CHECK AFTER INSTALLATION IS FINISHED.” on page 4.**

- After finishing the construction of refrigerant piping, drain piping, and electric wiring, conduct test operation accordingly to protect the unit.

### 12-1 How to test operation

1. Open the gas side stop valve.
2. Open the liquid side stop valve.
3. Electrify crank case heater for 6 hours.
4. Set to cooling operation with the remote controller and start operation by pushing ON/OFF button (  ).
5. Press INSPECTION/TEST OPERATION button (  ) 4 times (2 times for wireless remote controller) and operate at Test Operation mode for 3 minutes.
6. Push AIR FLOW DIRECTION ADJUST button (  ) to make sure the unit is in operation.
7. Press INSPECTION/TEST OPERATION button (  ) and operate normally.
8. Confirm function of unit according to the operation manual.
9. If the decoration panel has not been installed, turn off the power after the test operation.

### PRECAUTIONS

1. Refer to the diagnoses below if the unit does not operate properly.
2. After completing the test run, press the INSPECTION/TEST OPERATION button once to put the unit in inspection mode, and make sure the malfunction code is “00”. (=normal)  
If the code reads anything other than “00”, refer to the malfunction diagnoses below.

**NOTE** 

- If a malfunction is preventing operation, refer to the malfunction diagnoses below.

### 12-2 Cautions for servicing

**With the power on. Troubles can be monitored on the remote controller.**


- If the air conditioner does not operate normally after installing the air conditioner, a malfunction shown in the table below may happened.

Remote control display	Malfunction
No display	<ul style="list-style-type: none"><li>• Power supply trouble or Open phase connection</li><li>• Wrong wiring between indoor and outdoor unit</li><li>• Indoor PC board faulty</li><li>• Wrong remote control connection wiring</li><li>• Remote control faulty</li><li>• Fuse faulty</li></ul>
88*	<ul style="list-style-type: none"><li>• Indoor PC board faulty</li><li>• Wrong wiring between indoor and outdoor unit</li></ul>
88 flashing	<ul style="list-style-type: none"><li>• Wrong wiring between indoor and outdoor unit</li></ul>

\*After turning on the power, the maximum is 90 seconds, although it will only display “88”. This is not a problem, and it will be set for 90 seconds.

■ Trouble shooting with the display on the liquid crystal display remote controller.

1. With the wired remote controller. (NOTE 1)

When the operation stops due to trouble, operation lamp flashed, and “” and the Malfunction code are indicated on the liquid crystal display. In such a case, diagnose the fault contents by referring to the table on the Malfunction code list in case of group control, the unit No. is displayed so that the indoor unit no with the trouble can be recognized. (NOTE 2)

2. With the wireless remote controller.

(Refer also to the operation manual attached to the wireless remote controller)

When the operation stops due to trouble. the display on the indoor unit flashes. In such a case, diagnose the fault contents with the table on the Malfunction code list looking for the Malfunction code which can be found by following procedures. (NOTE 2)

(1) Press the INSPECTION /TEST OPERATION button, “” is displayed and “ 0 ” flashes.

(2) Press the PROGRAMMING TIME button and find the unit No. which stopped due to trouble.

Number of beeps 3 short beeps ..... Perform all the following operations

1 short beep ..... Perform (3) and (6)

1 long beep ..... No trouble

(3) Press the OPERATION MODE SELECTOR button and upper figure of the Malfunction code flashes.

(4) Continue pressing the PROGRAMMING TIME button until it makes 2 short beeps and find the upper code.

(5) Press the Operation selector button and lower figure of the Malfunction code flashes.

(6) Continue pressing the PROGRAMMING TIME button until it makes a long beep and find the lower code.


- A long beep indicates the Malfunction code.

**NOTE** 

1. In case wired remote controller. Press the INSPECTION /TEST OPERATION button on remote controller, “” starts flashing and changes the inspection mode.

2. Keep down the ON/OFF button for 5 seconds or longer in the inspection mode and the above trouble history disappears, after the trouble code goes on and off twice, followed by the code “00”(normal). The display changes from the inspection mode to the normal mode.

### 12-3 Malfunction code list

- For phases where the Malfunction code is left blank, the “” indication is not displayed. Though the system continues operating, be sure to inspect the system and make repairs as necessary.
- Depending on the type of indoor or outdoor unit, the Malfunction code may or may not be displayed.

Code	Malfunction/Remarks
A1	Indoor unit's PC board faulty
A3	Drain water level abnormal
A6	Indoor fan motor overloaded, overcurrent or locked
<b>AF</b>	Humidifier faulty
<b>AH</b>	Air cleaner faulty
	Only the air cleaner does not function.
AJ	Type set improper
	Capacity data is wrongly proset. Or there is nothing programmed in the data hold IC.
C1	Transmission error between PC boards (master - slave)
<b>C4</b>	Sensor for heat exchanger temperature is fault
<b>C5</b>	Indoor heat exchanger/evaporation temperature thermistor faulty
<b>C9</b>	Sensor for suction air temperature is fault
<b>CC</b>	Humidity sensor abnormal
<b>CJ</b>	Sensor for remote controller is fault
	The remote controller thermistor does not function, but the system thermo run is possible.
E1	Outdoor unit's PC board faulty
E3	High pressure abnormal (outdoor unit)
E4	Low pressure abnormal (outdoor unit)
E5	Compressor motor lock malfunction
E7	Outdoor fan motor lock malfunction
	Outdoor fan instantaneous overcurrent malfunction
E9	Electronic expansion valve faulty (outdoor unit)
F3	Discharge pipe temperature abnormal (outdoor unit)
H3	High pressure switch faulty (outdoor unit)
H7	Outdoor motor position signal malfunction
<b>H9</b>	Outdoor air thermistor faulty (outdoor unit)
	Equipment operation in response to errors will vary according to model.
J1	Pressure sensor system error (batch) (outdoor unit)
JA	Discharge pipe pressure sensor faulty
JC	Suction pipe pressure sensor faulty
<b>J3</b>	Discharge pipe thermistor faulty (outdoor unit)
	Equipment operation in response to errors will vary according to model.
J5	Suction pipe thermistor faulty (outdoor unit)
<b>J6</b>	Heat exchanger thermistor faulty (outdoor unit)
	Equipment operation in response to errors will vary according to model.
<b>J7</b>	Outdoor heat exchanger/evaporation temperature thermistor faulty (outdoor unit)
<b>J8</b>	Liquid piping temperature sensor system error (outdoor unit)
L1	Inverter error (outdoor unit)
L3	Reactor thermistor faulty (outdoor unit)
L4	Overheated heat-radiating fin (outdoor unit)
	Inverter cooling defect.

L5	Instantaneous overcurrent (outdoor unit)
	Possible earth fault or short circuit in the compressor motor.
L8	Electric thermal (outdoor unit)
	Possible electrical overload in the compressor or cut line in the compressor motor.
L9	Stall prevention (outdoor unit)
	Compressor possibly locked.
LC	Transmission malfunction between the outdoor control units' inverters (outdoor unit)
<b>P1</b>	Open-phase (outdoor unit)
P3	P-board temperature sensor malfunction (outdoor unit)
<b>P4</b>	Heat-radiating fin temperature sensor malfunction (outdoor unit)
PJ	Type set improper (outdoor unit)
	Capacity data is wrongly proset. Or there is nothing programmed in the data hold IC.
<b>U0</b>	Suction pipe temperature abnormal
U1	Reverse phase
	Reverse two phase of the L1,L2and L3 leads.
<b>U2</b>	Power source voltage malfunction (outdoor unit)
	Includes the defect in 52C.
U4 UF	Transmission error (indoor unit – outdoor unit)
	Wrong wiring between indoor and outdoor units or malfunction of the PC board mounted on the indoor and the outdoor units.
U5	Transmission error (indoor unit – remote controller)
	Transmission is improper between the indoor unit and the remote controller.
UA	Miss setting for multi system
	Setting is wrong for selector switch of multi-system. (see switch SS2 on the main unit's PC board)
UE	Transmission error (indoor unit - central controller)
<b>UC</b>	Central control address overlapping



### CAUTION

- Refer to “2. Items to be checked at time of delivery” on page 4 upon completion of the test run and make sure that all the items are checked.
- If the customer's interior work has not been finished on completion of the test run, explain the customer not to operate the air conditioner. This is essential until the interior work is finished so as to protect the product.  
Substances generated from paints and adhesives used for the interior work may contaminate the product if the unit is operated.



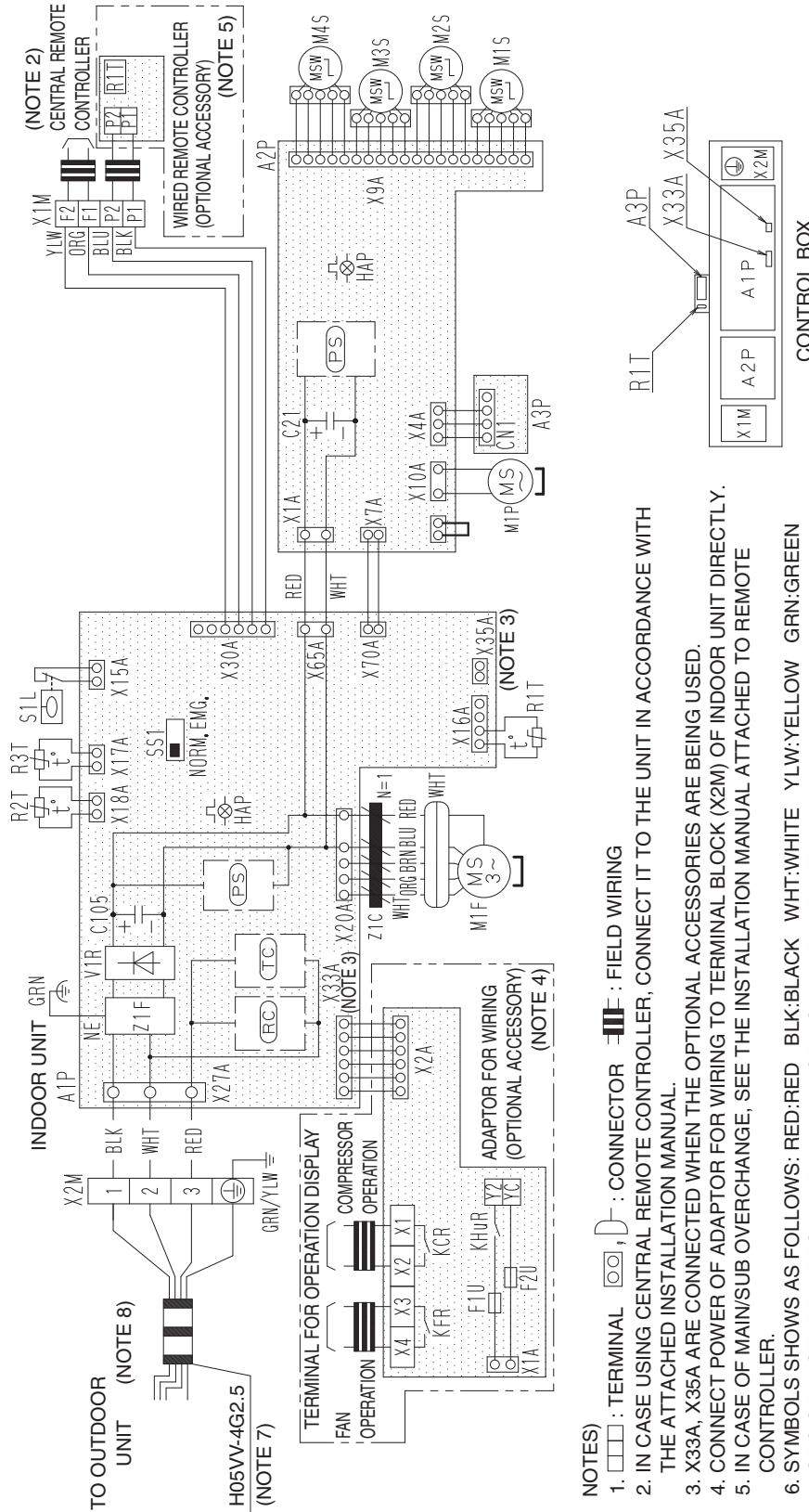
### To test run Contractors

When delivering the product to the customer after the test run is completed, check that the control box lid, the air filter and the suction grille are mounted. In addition, explain to the customer regarding the state (ON/OFF) of the power supply breaker.

## 13. WIRING DIAGRAM

(Refer to Fig. 37)

# WIRING DIAGRAM



- NOTES**
1. □□□ : TERMINAL □□□□ : CONNECTOR □□□□ : FIELD WIRING
  2. IN CASE USING CENTRAL REMOTE CONTROLLER, CONNECT IT TO THE UNIT IN ACCORDANCE WITH THE ATTACHED INSTALLATION MANUAL.
  3. X33A, X35A ARE CONNECTED WHEN THE OPTIONAL ACCESSORIES ARE BEING USED.
  4. CONNECT POWER OF ADAPTOR FOR WIRING TO TERMINAL BLOCK (X2M) OF INDOOR UNIT DIRECTLY.
  5. IN CASE OF MAIN/SUB OVERCHANGE, SEE THE INSTALLATION MANUAL ATTACHED TO REMOTE CONTROLLER.
  6. SYMBOLS SHOWS AS FOLLOWS: RED:RED BLK:BLACK WHT:WHITE YLW:YELLOW GRN:GREEN ORG:ORANGE BRN:BROWN PNK:PINK GRY:GRAY BLU:BLUE
  7. SHOWS ONLY IN CASE OF PROTECTED PIPES, USE HO7RN-F IN CASE OF NO PROTECTION.
  8. MODEL OUTDOOR UNIT SHOWN IN THIS DIAGRAM SHOWS THE OUTLINE OF PRODUCT. FOR THE DETAIL, SEE WIRING DIA-GRAM ATTACHED TO OUTDOOR UNIT.

INDOOR UNIT	
A1P	PRINTED CIRCUIT BOARD
A2P	PRINTED CIRCUIT BOARD
A3P	PRINTED CIRCUIT BOARD (HUMIDITY SENSOR UNIT)
C21	CAPACITOR
C105	CAPACITOR
HAP	LIGHT-EMITTING DIODE (SERVICE MONITOR GREEN)
M1F	MOTOR (INDOOR FAN)
M1P	MOTOR (DRAIN PUMP)
M1S~	MOTOR (SWING FLAP)
M4S	THERMISTOR (AIR)
R1T	THERMISTOR (COLL)
R2T~R3T	FLOAT SWITCH
S1L	SELECTOR SWITCH (EMERGENCY)
V1R	DIODE BRIDGE
X1M	TERMINAL STRIP
X2M	TERMINAL STRIP
Z1C	TERMINAL STRIP
Z1F	NOISE FILTER
(PS)	POWER SUPPLY CIRCUIT
(RC)	SIGNAL RECEIVER CIRCUIT
(TC)	SIGNAL TRANSMISSION CIRCUIT
	WIRED REMOTE CONTROLLER
R1T	THERMISTOR (AIR)
	ADAPTOR FOR WIRING
F1U	FUSE (⊕, 5A, 250V)
F2U	FUSE (⊕, 5A, 250V)
KCR	MAGNETIC RELAY
KFR	MAGNETIC RELAY
KHuR	MAGNETIC RELAY (Hu)
	CONNECTOR FOR OPTIONAL PARTS
X33A	CONNECTOR (ADAPTOR FOR WIRING)
X35A	CONNECTOR (ADAPTOR FOR WIRING)
	CONNECTOR (GROUP CONTROL ADAPTOR)

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Fig. 37

